Biography

Jack Brouwer, Ph.D., Adjunct Assistant Professor, Mechanical and Aerospace Engineering, U.C. Irvine
Associate Director, National Fuel Cell Research Center

Dr. Jack Brouwer is Adjunct Assistant Professor of Mechanical and Aerospace Engineering at U.C. Irvine (UCI) and the Associate Director of the National Fuel Cell Research Center (NFCRC). Dr. Brouwer completed doctoral studies in Mechanical Engineering and Chemical Engineering at the Massachusetts Institute of Technology (MIT). Prior to joining the NFCRC, Dr. Brouwer was a research faculty at the University of Utah, a Senior Engineer at Reaction Engineering International, and a Staff Scientist at Sandia National Laboratories. Dr. Brouwer has expertise in energy systems, fuel cell technology, turbulent reacting flows, computational fluid dynamics, chemical kinetics, and electrochemical reactions with concurrent heat, mass and momentum transfer in electrochemical systems. Dr. Brouwer is leading research and development efforts including projects on hydrogen refueling, the world's first independent fuel cell vehicle testing, the world's first testing and evaluation of a hybrid fuel cell gas turbine system, the development and application of dynamic fuel cell and hybrid fuel cell systems simulations, and the advancement of reformation technologies for gaseous, liquid, and solid hydrocarbon fuels. Dr. Brouwer is a regular instructor at UCI in the areas of fuel cells, thermodynamics, heat transfer, and combustion. He developed and introduced the first graduate level fuel cell course to UCI in 2002, and is a regular instructor in fuel cell short courses around the world.